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ABSTRACT

The purpose of this paper is to examine the need for various classes and types of research in local school districts in collaboration with external researchers. It defines research and then argues the need to support basic research as well as applied research in schools. It provides a few definitions of various types and classes of research to show how knowledge of the differences can influence the types of research a school district might engage in. The paper concludes with suggestions to school districts on how and when to say no to proposed research in their schools and a description of a research review committee. (Author/LD)

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THE CONDUCT OF RESEARCH IN SCHOOLS: HOW TO SAY NO

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The Conduct of Research in Schools: How to say no

Introduction

The purpose of this paper is to present an argument expressing the need for various classes and types of research in local school districts in collaboration with external researchers. In order to continually upgrade the profession we must support basic research as well as applied research. We cannot however support every research proposal that external researchers think important. We must at times say no. In order to say no responsibly we must foster clearer definition of just what "Research" means in public school settings and we must carefully work out policy, procedure and decision making systems that identify what classes and types of research we will support in the public schools.

What is Research

The dictionary definition of Research (English & English 1975) is as follows: Research: n systematic detailed and relatively prolonged attempt to discover or confirm the facts that bear upon a certain problem or problems and the laws or principles that govern it.

There are other types of Research defined by English & English that more appropriately describe what is done in local school settings.

a. Field investigation: collection of data outside the laboratory, library or clinic; the study of organisms in their usual habitats.
b. Investigation: n a systematic examination of phenomena in order to understand or explain them.

In addition there are other "common" names applied to various research efforts such as field research, library research, experimentation, inquiry, policy research, etc. The distinction, for purposes of this paper that is

important to make, is that there is not a clear definition of each that allows educators to distinguish the purpose of one class or type of research from the other.

Kerlinger (1977) provides an eloquent, clear rational argument for the necessity of conducting basic research as a part of the educational research endeavor. Kerlinger stated,

> "The basic purpose of scientific research is theory. This rather enigmatic statement means that the purpose of scientific research is to understand and explain phenomena (see Braithwaite, 1953). A theory presents a systematic view of phenomena by specifying relations among variables, with the purpose of explaining and predicting the phenomena. Theory is held in high esteem by behavioral scientists and rightly so. The high esteem springs from science's basic purpose, and theory is the vehicle for expressing the basic purpose. Science, then, really has no other purpose than theory, or understanding and explanation" (Kerlinger 1977).

and then later he states the purpose for applied research is:

> "Methods used by scientists are of course used in applied research. But the purpose of applied research is to help in making decisions and these decisions are ordinarily tied to relatively specific problems, even though they may be large problems. So applied research can of course be used to help solve such problems, but this problem solving does not ordinarily lead to understanding of the complex phenomena behind educational practice. While indispensable, especially when done in a milieu in which basic research is strong, its power and general applicability are limited." (Kerlinger 1977)

Any researcher worth his t test, upon reading Kerlinger's article reaffirms his faith in the experimental method and the need for basic scientific research. Kerlinger however, makes his point too well. His support for strong basic research puts us into physiological studies, psychological and learning theory development. Kerlinger expands his point in the next paragraph by saying:

> "In other words, the goal should not be the improvement of reading! It should be understanding of the relations among the many complex phenomena related to reading. Research directed toward improving anything but minor skills is doomed to triviality, frustration, and defeat. To improve something as complex as reading requires understanding of reading and many related phenomena, a very difficult task indeed. And there is of course no guarantee of improvement in children's reading, even if basic research on phenomena related to reading is done.
>
> It is unrealistic, therefore, to ask how a piece of scientific research will produce such-and-such educational results. This demand has probably weakened educational research more than any other single cause." (Kerlinger 1977)

We would counter with the charge that it is at least equally unrealistic for educators to be uninterested in improving reading. The improvement of the teaching of reading and the improvement of the process of learning those skills that make up the set of behavioral acts called reading is a realistic goal for educators. The use of some types of research to attain this goal is equally realistic.

Slavin (1978) clearly points out that Kerlingers argument for basic research to the exclusion of applied research is tenuous at best, Slavin states,

> "no one would argue that all basic research should be stopped. What we are discussing here is an emphasis, a matter of degree. Kerlinger's fear is that abandoning basic research and promotion of advances in theory would leave us impotent as a science, vulnerable when conditons change and or timebound findings no longer apply. My fear, which I think is a far more realistic one, is that by retreating into our comfortable, non-controversial ivory towers, we leave the field open for the advocates and plain charlatans who simply say what they think without any direct foundation in research. For example, the greatest movement in the past few years in public schools has been the open school. One day there were none; a few years later half of all new school construction was open space. This all happened entirely without the benefit of evaluative research. Free schools, alternative schools, team teaching, and many other innovations have sprung fully armed and ready to go without a shred of evidence of outcomes. If applied researchers do not keep up relentless pressure, educators will continue to push from fad to fad indefinitely. While we keep our scientific objectivity and aloofness from the dirty, edeologically tainted, expensive, and difficult enterprise involved in applied research, the matter will pass from our hands." (Slavin 1978)

The purpose for this discourse on research and the necessity of clear definition is simply to point out the obvious. There are various types of research that are valuable to education and divergent opinions as to which is most important. In order to responsibly and ethically participate in a decision of whether to allow research in the public schools where you are employed, one must first identify the type and judge whether its purpose and worth is congruent with that of the district.

Tentative Definitions of Classes and Types of Research

Although it is obviously presumptive of this writer to attempt a finite set of definitions of the various classes and types of research now occurring

in education, an illustration will be attempted in an effort to distinguish differences that currently are glossed over in the too general term of "Research"

My purpose in this section of the paper is to provide a few definitions of various types and classes of research, first to provide some examples of the differences and second to show how the knowledge of the differences can influence the types of research that a school district might engage in, or allow to occur within its schools. An additional purpose is to suggest a list of classes and types of research that hopefully will be clarified and added to by other writers.

Basic Research

The dictionary definition of Research (English & English 1975) is as follows: Research: n systematic detailed and relatively prolonged attempt to discover or confirm the facts that bear upon a certain problem or problems and the laws or principles that govern it.

Class A Basic

Research (implied by Kerlinger (1977) that is conducted to understand the laws that govern facts that occur around problems or issues. This would include such things as studies that examine the effect of electrical versus chemical neural transmission during learning, the physiological effects of age, puberty stress, environment etc. upon learning. Laboratory psychological, physiological, sociological studies that provide insights into the underlying laws that govern the transmission and reception of learning in humans.

Class B Basic

Research (implied by Jackson & Kieslar 1977) that attempts to explain the relationship between laws of learning and related facts. This class of research is usually pivotal in nature and may produce further class A research as well as applied research type 1. This includes such studies as classical verbal learning studies, the effects of various schedules of reinforcement, etc.

Applied Research Type 1

Research (implied by Slavin 1978) that attempts to verify facts, as they relate to human learning, suggested by basic research class A and B. This includes such studies as behavior modification strategies, application of schedules of reinforcement, identification of rates of acquisition, and retention of learning in humans under different controlled conditions. Currently very few researchers are approaching local school districts with this type of request to do research.

Applied Research Type 2

Research that attempts to verify facts as they relate to human learning under naturally occurring conditions. This includes studies that apply facts to practice, or attempt to modify practice such as in classrooms through manipulation of various sequences of facts known to be related to learning. This area, of vital interest and concern to many educators, is rarely examined by external researchers.

Applied Research Type 3

Research that studies the effects of various approaches to teaching, rearrangement of methods of teaching, modification of content, order or structure of classrooms, conditions of sound or light and the concomitant effects on learning etc. School districts are most often approached regarding participation in studies of this type.

Non Research or Investigation

To the researcher in Kerlinger's camp, this broad area might be defined as nominal type data. However, much of the information needed for running a school district falls within this category. Descriptions of programs, information for decision making (enrollment projection, test data, planning documents, etc) and evaluation reports all are events of this type. Rarely do these activities approach Type 1 Applied, yet they must be viewed with the same rigor as basic research. Without an objective data base a school district cannot operate, let alone implement any of the findings from the previously described type of research.

Need for Research in Schools

Earlier papers, Barber (1978a) Barber (1978b), editorials, Schutz (1976) speeches and articles, Kerlinger (1977) Slavin (1978) have spoken clearly to the need for research in schools about schooling, education, and learning theory. The facts are clear and ever present. We must support research of all kinds in public schools, very often in collaboration with external researchers (Barber 1978), and at the same time we must deny some research for various reasons. A particular study may violate a federal law such as the Family Educational Rights and Privacy Act of 1974. It may violate state laws or local board policy. A particular study may be to costly to participate in. It may not be a topic in which we are interested, or it may be a poor study, ill conceived and badly designed. It is obvious that the public schools cannot participate in every study that external researchers think important. We must deny some of them. We must support some of them. The question is simply how and when to say no?

Three answers come quickly to mind, 1) Don't ever decide yes or no alone; 2) Don't decide quickly, think about participation for at least two weeks after the request; 3) make sure that whatever you participate in is congruent with existing laws, regulations and policy. Perhaps the best and most comprehensive answer is the development of three independent acts formed together as a logical system. The first is the establishment of board policy that identifies the various types of research the local board might wish to participate in and the strength of its committment. The second is the establishment of a set of decision rules predicated on the board policy that allows the administration of the school district an opportunity to interpret, under guidelines, the board policy. The third is the establishment of a local research review committee.

The Research Review Committee (RRC)

This committee should be the implementation arm of the policy of the local board, if you will, an extension of the decision rules that the board policy should grant to the administration. The RRC should also serve as the local board for Human Subjects Protection Committee to ensure the privacy and safety

rights of students who would be involved in any research undertaken in the district.

The general style of the RRC could be developed to operate in any of a number of ways but must be consistent with the intent of the board policy and administrative decision rules. For example the RRC could be formed to develop proposed board policy and administrative decision rules that when approved could be implemented by the RRC.

The make-up of the membership of the RRC should also be congruent with the relationship between board policy, administrative decision rules and implementation plan. The membership should therefore be dependent upon the purpose defined by board policy. For example, if the purpose of the policy was to judge the quality of research the board wished to participate in solely on the technical merits of the study then the composition of the committee should contain a majority of technically competent research design members. If the purpose of the policy was to engage primarily in applied research Type 1 or Type 2, then the committee membership should consist of a majority of members who have knowledge of applied research methodology and who are aware of current applied research possibilities and problems within the district. Regardless of purpose however, the RRC should always have at least one highly competent technically knowledgeable research design person.

Another function the RRC should serve, regardless of purpose, is as a review and translation group so that the results of any study conducted in the public schools has as a part of its final report at least a section that attempts to communicate to the board and public the purpose, method and findings of the study. The concern here is that the role of a translater of research be performed to communicate to the public the results of the research funding that they have endorsed.

An additional function the committee should perform is chat of keeping records of all studies conducted in the district, where they are done, which children and staff are involved, etc. so as not to place an inappropriate burden of research participation upon a small segment of the population (this function is important in university towns, because the demand is far greater

on those students and staff in buildings that are within easy walking distance of the university).

Finally another function of the RRC is to perform some annual research needs assessment to inform the external researchers of the types of applied research the district desires (if this purpose is congruent with the purpose of board policy).

Conclusion

In conclusion, it is hoped that this paper has presented an argument for the need for educational research in, not necessarily upon schools, an argument to support basic research, as well as applied research in schools, a rational for the development of several different definitions of the various classes and types of research to clarify what is meant by the generic term, "Research" and finally a tentative solution to the dilemma of how and when a local school district goes about the task of informing external researchers that they are or are not interested in allowing research to be conducted in their schools.

It is further the hope of this writer that this paper and its intent can be instrumental in fostering dialogue within the educational research community that eventually might produce a greater degree of collaboration between the various segments of that community in the conduct of research which will in the long run prove to be of benefit to children and teachers engaged in the difficult process of learning.

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